



## PEQ & ENERGY STAR® for Congregations Stewardship Action List for New Jersey

**Why  
save  
energy?**

**PEQ**

Partners for Environmental  
Quality—An Interfaith  
Coalition



New Jersey DEP Global  
Climate Change  
Greenhouse Gas Program

**Stewardship of creation.** Most faiths have a tradition of ethical concern regarding the stewardship of natural resources that support life, as well as their financial resources. Wasted energy is not only poor stewardship of funds, but it's wasted natural resources, and causes unnecessary pollution.

**ENERGY STAR for congregations** is a free service of the US Environmental Protection Agency, offering technical support and public recognition for voluntary congregational energy efficiency. This "action list" draws from the more detailed information available in ENERGY STAR's free 100-page guide, "Putting Energy into Stewardship," available at [www.epa.gov/congregations](http://www.epa.gov/congregations) or by calling the toll-free hotline at 1-888 STAR YES.

✓ **Call Partners for Environmental Quality (PEQ)** 609.394.1090, or visit the website at [www.peqnj.org](http://www.peqnj.org) to learn more about how your congregation can participate through PEQ in the New Jersey Department of Environmental Protection "Covenant of Sustainability" program. PEQ can also provide referrals to local sources for technical assistance and energy analysis surveys. Some free services may be available, but a reasonable fee can be quickly repaid with energy savings. Your congregation may even have a member with needed skills.

✓ **Visit the NJ Smart Start Buildings website**, at [www.smartstartbuildings.com](http://www.smartstartbuildings.com), and [www.njcleanenergy.com](http://www.njcleanenergy.com), to learn about free services at your local utility. The program provides a wide range of support, including rebates and incentives for qualifying energy efficiency upgrades, clean energy generation systems, and technical assistance.

✓ **Download ENERGY STAR's free "walk-through" energy assessment tool** for a quick facility self assessment; then enter the data online and receive a customized response targeting energy efficiency opportunities for your congregation (Available late summer 2002 at [www.epa.gov/congregations](http://www.epa.gov/congregations)).

### LIGHTING

✓ **Turn off lights (and other equipment) when not in use.** High utility costs often include paying for energy that is completely wasted.

✓ **Install "occupancy sensors" in proper locations** to automatically turn off lighting when no one is present, and back on when people return. Even good equipment can be installed wrong, so don't install the sensor

behind a coat rack, door, or bookcase. It must be able to "see" an approaching person's motion to turn on the light before, or as they enter an unlit area. You can also set sensors to work or not, according to your faith's traditions. Rebates are available through the NJ Smart Start buildings program.

✓ **Replace incandescent light bulbs with compact fluorescent lamps (CFLs)**, wherever appropriate. CFLs cost about 75% less to operate, and last about 10 times longer.

✓ **Adjust lighting to your actual needs; use free "day lighting."** This means turn off or dim your lights when daylight is adequate, or use automatic "daylight dimming" ballasts/controls to do this for you. To prevent glare, eyestrain, and headaches, do not "over-light." Too much light can be as bad for visual quality as too little light—and it costs a lot more.

✓ **Install brighter, safer LED (light emitting diode) exit signs.** Current exit signs may accept a simple, "screw-in" lighting element to replace the small incandescent bulbs that burn out with frustrating frequency. This string of LEDs will cost about \$15 to \$40, may last more than 10 years, give brighter light, and end risky ladder climbing to replace bulbs. A new LED exit sign fixture costs about \$100, but will still save about 90% over incandescent bulbs' operating costs. Rebates are available through the NJ Smart Start Buildings Program.

✓ **Consider T-8 (1" diameter) fluorescent lamp tubes** with solid-state electronic ballasts that are more efficient than older T-12 (1.5" diameter) tubes. Rebates are available through the NJ Smart Start Buildings Program.

### OFFICE AND KITCHEN EQUIPMENT

✓ **Always buy ENERGY STAR labeled equipment** for your congregation, business and home. The ENERGY STAR label indicates the most efficient computers, printers, copiers, refrigerators, televisions, windows, thermostats, ceiling fans, other appliances and equipment. Find products online at [www.energystar.gov](http://www.energystar.gov).

✓ **Clean refrigerator coils twice a year.** Replace door gaskets if a dollar bill easily slips out when closed between the door's seals.



# Real Savings



## RELATED LINKS

Partners for Environmental Quality

[www.peqnj.org](http://www.peqnj.org)

Smart Start Buildings Program

[www.smartstartbuildings.com](http://www.smartstartbuildings.com)

New Jersey Clean Energy

[www.njcleanenergy.com](http://www.njcleanenergy.com)

New Jersey DEP Global Climate Change Greenhouse Gas Program

[www.state.nj.us/dep/dsr/gcc/gcc.htm](http://www.state.nj.us/dep/dsr/gcc/gcc.htm)

ENERGY STAR for congregations

[www.epa.gov/congregations](http://www.epa.gov/congregations)

Green Energy

<http://www.epa.gov/globalwarming/actions/cleanenergy/greenpower/>

Rebuild America

[www.rebuild.org](http://www.rebuild.org)

DOE on Energy and Global Warming

[www.eia.doe.gov/oiaf/1605/ggcebro/chapter1.html](http://www.eia.doe.gov/oiaf/1605/ggcebro/chapter1.html)

## WATER - HOT AND COLD

- ✓ **Fix leaks.** Small leaks add up to many gallons and dollars wasted each month. Water conservation saves energy and money.
- ✓ **Use sink aerators and water efficient showerheads and toilets** to save water. Ask PEQ about water efficiency kits which include these items.
- ✓ **Install an insulation blanket** on water heaters seven years or older, and **insulate the first 3 feet of the heated water "out" pipe** on both old and new units.
- ✓ **If buying a new water heater, always buy ENERGY STAR labeled equipment.** In areas of infrequent use consider "tankless" water heaters to reduce "standby" storage costs and waste. Set water temperature only as hot as needed (110-120 degrees) to prevent scalds and save energy.
- ✓ **When landscaping,** use plants native to your climate to require minimal watering and better pest resistance. If local code allows, consider diverting "gray water" for irrigation.

## HEATING AND AIR-CONDITIONING

- ✓ **"Tune-up" your HVAC system with an annual maintenance contract.** Even a new ENERGY STAR labeled HVAC (heating/ventilation/air-conditioning) system (just like a new car) will decline in performance without regular maintenance. A yearly "maintenance contract" costs as little as \$100 depending on the building and HVAC system, but can save even more than this. A contract automatically ensures that your HVAC contractor will provide "pre-season" tune-ups before each cooling and heating season. You save energy and money, and your system will last years longer. Rebates are available through the NJ Smart Start Buildings Program.
- ✓ **Regularly change (or clean if reusable) HVAC filters - every month** during peak cooling or heating season. New filters usually cost only \$2-5 each. Dirty filters cost more to use, overwork the equipment, and result in dirtier indoor air.
- ✓ **Install a programmable thermostat** to automate your HVAC system. This solid-state, electronic device optimizes HVAC operation "24/7" based on your schedule, and can be "overridden" as needed for unscheduled events. So members always enter a comfortable building, this "smart thermostat" can turn on the HVAC one hour before arrival instead of heating or cooling unoccupied space. Units cost \$25 to \$150, and using them can cut HVAC costs up to 30%. Rebates are available through the NJ Smart Start Buildings Program.

## ✓ Control direct sun through windows.

Depending on the season and local climate, during cooling season, block direct heat gain from the sun shining through glass on the East and especially West sides of the building. Depending on your facility, options such as "solar screen," "solar film," awnings, and vines can help. Over time, trees can attractively shade the building, and help clean the air. Interior curtains or drapes can help, but it's best to prevent the Summer heat from getting past the glass and inside. During heating season, with the sun low in the South, unobstructed Southern windows can contribute solar heat gain during the day.

- ✓ **Use fans.** Comfort is a function of temperature, humidity, and air movement. Moving air can make a somewhat higher temperature and/or humidity feel comfortable. Fans can help delay or reduce the need for air-conditioning, and a temperature setting of only 3-5 degrees higher can feel as comfortable with fans. Each degree of higher temperature can save about 3% on cooling costs. When the temperature outside is more comfortable than inside, a "box fan" in the window, or large "whole building" fan in the attic can push air out of the building and pull in comfortable outside air. Fans can improve comfort and save energy year round.

- ✓ **Plug leaks with weatherstripping and caulking.** Caulking and weatherstripping let you manage your ventilation, which is the deliberate controlled exchange of stuffy inside air for fresher outdoor air. Most non-residential buildings require 15-20 cubic feet per minute (CFM) ventilation per person for healthy indoor air. Exceptions and details can be found in "Building Air Quality" at [www.epa.gov/iaq](http://www.epa.gov/iaq). "Air infiltration" is the uncontrolled "leaking" of inside air (which costs to heat or cool) through cracks around windows, doors, utility switches/outlets, etc. This makes comfort costly, and difficult.



## CLEAN ENERGY

**Consider switching to electricity generated from a clean, renewable source** such as solar, or wind power certified by Green-e. Visit [www.green-e.org](http://www.green-e.org), [www.epa.gov/greenenergy](http://www.epa.gov/greenenergy) and [www.peqnj.org](http://www.peqnj.org) for information.

**Let us help.** Become a partner in ENERGY STAR for free, unbiased technical information and support. Contact us toll free at 1-888 STAR YES or [www.epa.gov/congregations](http://www.epa.gov/congregations) and receive your free 100-page Partners' guide, "Putting Energy into Stewardship."

With energy efficiency, your congregation can be a better steward of your money and of creation. Will your congregation take up the challenge and help leave a cleaner, more livable planet for future generations?